

Date: Wednesday, 2/20/2008 4:21:55 PM
 User: Kim Johnston

Process Sheet

| | | | |
|-----------------------|--|------------------|-----------------|
| Customer | : CU-DAR001 Dart Helicopters Services | Drawing Name | : R/H STEP ASSY |
| Job Number | : 37531 | | |
| Estimate Number | : 13170 | | |
| P.O. Number | : | Part Number | : D3724042 |
| This Issue | : 2/20/2008 S.O. No. : | Drawing Number | : D3724 U/R |
| Prsht Rev. | : NC | Project Number | : N/A |
| First Issue | : / / | Drawing Revision | : U/R |
| Previous Run | : | Material | : |
| Written By | : <u>W</u> | Due Date | : 3/10/2008 |
| Checked & Approved By | : | Qty: | 1 Um: Each |
| Comment | : Est Rev:A new issue 08-02-07 DD verified by: | | |

Additional Product

Job Number:



| | | |
|---------|-----------------------|---------------|
| Seq. #: | Machine Or Operation: | Description : |
|---------|-----------------------|---------------|

| | | |
|-----|-----------|-----------|
| 1.0 | D2622120C | Extrusion |
|-----|-----------|-----------|



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

| | | |
|-----|------------|-------------|
| Qty | Part # | Description |
| 1 | D2622-120C | Extrusion |

Batch:

B35618
B34694

Check Material for any Dents or Defects

08-02-25

| | | |
|-----|-------------|------------------------------|
| 2.0 | LARGE FAB 1 | LARGE FABRICATION RESOURCE 1 |
|-----|-------------|------------------------------|



Comment: LARGE FABRICATION RESOURCE 1

1-Cut D3737-1 as per dwg D3737 = B356182-Cut D3738-1 as per dwg D3738 = B34694

3-Deburr and bevel ends for welding

08-02-25
08-02-25
08-02-25

| | | |
|-----|-----|------------------------------|
| 3.0 | QC5 | INSPECT WORK TO CURRENT STEP |
|-----|-----|------------------------------|



Comment: INSPECT WORK TO CURRENT STEP

08-02-25

| | | |
|-----|--------|--------|
| 4.0 | D37331 | GUSSET |
|-----|--------|--------|



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

GUSSET

batch 37297

08-02-25

| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
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| | | | | | | | |

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

| NCR: | | WORK ORDER NON-CONFORMANCE (NCR) | | | | | | |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC Section A | Corrective Action Section B | | | Verification Section C | Approval Chief Eng | Approval QC Inspector |
| | | | Initial Chief Eng | Action Description Chief Eng | Sign & Date | | | |
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Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: R/H STEP ASSY

Job Number: 37531

Part Number: D3724042

Job Number:



Seq. #:

Machine Or Operation:

Description :

5.0

LARGE FAB 1

LARGE FABRICATION RESOURCE 1



Comment: LARGE FABRICATION RESOURCE 1

1-Weld D3738-1, D3737-1 and D3733-1 as per dwg D3724

2-Grind flush

Handwritten: 08-02-25
08-02-25

6.0

QC9

VISUAL WELDING INSPECTION



Comment: VISUAL WELDING INSPECTION

Handwritten: 08-02-25 (1)

7.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

Handwritten: 08-02-25 (1)

8.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

Chemical Conversion Coat as per QSI 005 4.1

Handwritten: M-H

Handwritten: 08/02/26

Handwritten: (K)

9.0

QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



Comment: INSPECT POWDER COAT/CHEMICAL CONVERSION

Handwritten: 08-02-27 (1)

10.0

D2734

206 Step Endplate



Comment: Qty.: 2.0000 Each(s)/Unit Total : 2.0000 Each(s)

206 Step Endplate

batch *Handwritten:* B36520

Handwritten: 08-03-18

11.0

D37281

PLATE



Comment: Qty.: 3.0000 Each(s)/Unit Total : 3.0000 Each(s)

PLATE

batch *Handwritten:* 37579

Handwritten: X

12.0

D37291

PLATE



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

PLATE

batch *Handwritten:* 375800 (1)

Handwritten: X

| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
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Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

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Drawing Name: R/H STEP ASSY

Job Number: 37531

Part Number: D3724042

Job Number:



Seq. #:

Machine Or Operation:

Description :

13.0

D37301

ANGLE



Comment: Qty.: 8.0000 Each(s)/Unit Total : 8.0000 Each(s)

ANGLE

batch 37576 x(8)

14.0

D37411

ANGLE



Comment: Qty.: 8.0000 Each(s)/Unit Total : 1.0000 Each(s)

ANGLE

batch 37400 x(6), B 37762 x(2)

15.0

MS20470AD511

Rivet



Comment: Qty.: 12.0000 Each(s)/Unit Total : 12.0000 Each(s)

Rivet

batch m107100 x(3)

MF

08-03-13

16.0

MS20470AD516

Rivet



Comment: Qty.: 4.0000 Each(s)/Unit Total : 4.0000 Each(s)

Rivet

batch m107100 x(13)

MF

08-03-13

17.0

CR321354

Cherry Rivet



Comment: Qty.: 32.0000 Each(s)/Unit Total : 32.0000 Each(s)

Cherry Rivet

batch m107100

MF 08-03-13

18.0

LARGE FAB 1

LARGE FABRICATION RESOURCE 1



Comment: LARGE FABRICATION RESOURCE 1

1-Apply Magnobond before installing rivets

A/R Magnobond 6398 Batch: m104677

2-Rivet D3741-1 and D3730-1 to brackets before installing on step as per dwg D3724

3-Transfer holes from D3730-1 and D3741-1 into step as per dwg D3724

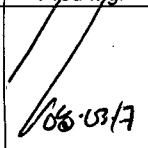
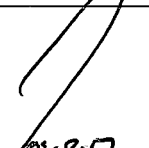
4-Deburr

P10

MF 08-03-13

MF 08-03-14

MF 08-03-14

| W/O: | | WORK ORDER CHANGES | | | | | |
|----------|------|---|----|----------|-----|---|---|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
| 08-03-12 | 18. | Took 9 rivets ms20470AD516 (instead of ms20470AD511) and cut down to size to fit angle 3730-1 | MF | 08-03-12 | 3 |  |  |
| | | | | | | | |

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

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Drawing Name: R/H STEP ASSY

Job Number: 37531

Part Number: D3724042

Job Number:



Seq. #:

Machine Or Operation:

Description :

5- realodine holes

19.0

LARGE FAB 1

LARGE FABRICATION RESOURCE 1



Comment: LARGE FABRICATION RESOURCE 1

1-Apply magnabond as per dwg D3724

A/R Magnabond 6398 Batch: M106695

2-Rivet brackets in place on step as per dwg D3724

3-Weld both end cap as per Dwg D3724

4-Grind end cap welds flush

Inspect for foreign object per QSI 024

Ph 08.03.14 1
Ph 08.03.14 1
Ph 08.03.14 1
SA 08.03.14 1

20.0

QC9

VISUAL WELDING INSPECTION



Comment: VISUAL WELDING INSPECTION

PD 08-03-15

21.0

QC5

INSPECT WORK TO CURRENT STEP



**ENGINEER
APPROVAL**



Comment: INSPECT WORK TO CURRENT STEP

1/2 08/03/15 (40)

22.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

Chemical Conversion Coat as per QSI 005 4.1

M-H/aim

08/03/15

(1X)

23.0

POWDER COATING

POWDER COATING



Comment: POWDER COATING

Powder Coat White Gloss (Ref: 4.3.5.1) as per QSI 005 4.3

M 107005

1/2 08-03-17

(1)

24.0

QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



Comment: INSPECT POWDER COAT/CHEMICAL CONVERSION

Ph 08/03/17 (1)

| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
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| | | | | | | | |

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: D Date: 20/03/17
 QA: N/C Closed: _____ Date: _____

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Job Number: 37531

Part Number: D3724042

Job Number:



Seq. #:

Machine Or Operation:

Description:

25.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



m107385



Comment: Wing Walk as per Dwg D3043 and QSI 005 4.4

FX 08/03/17 (1)

26.0

QC3

INSPECT WORK TO CURRENT STEP



[Signature]



Comment: INSPECT WORK TO CURRENT STEP

27.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and Stock

Location: *PP 37577*

PP 37577

08/03/17 (1)

28.0

QC21

FINAL INSPECTION/W/O RELEASE



(1)

Comment: FINAL INSPECTION/W/O RELEASE

08/03/17

Job Completion



08/03/17

POSITIVE RECALL

EFFECTIVE *08/02/21* AUTH *[Signature]*

RELEASED *AS* DATE *08/03/17*

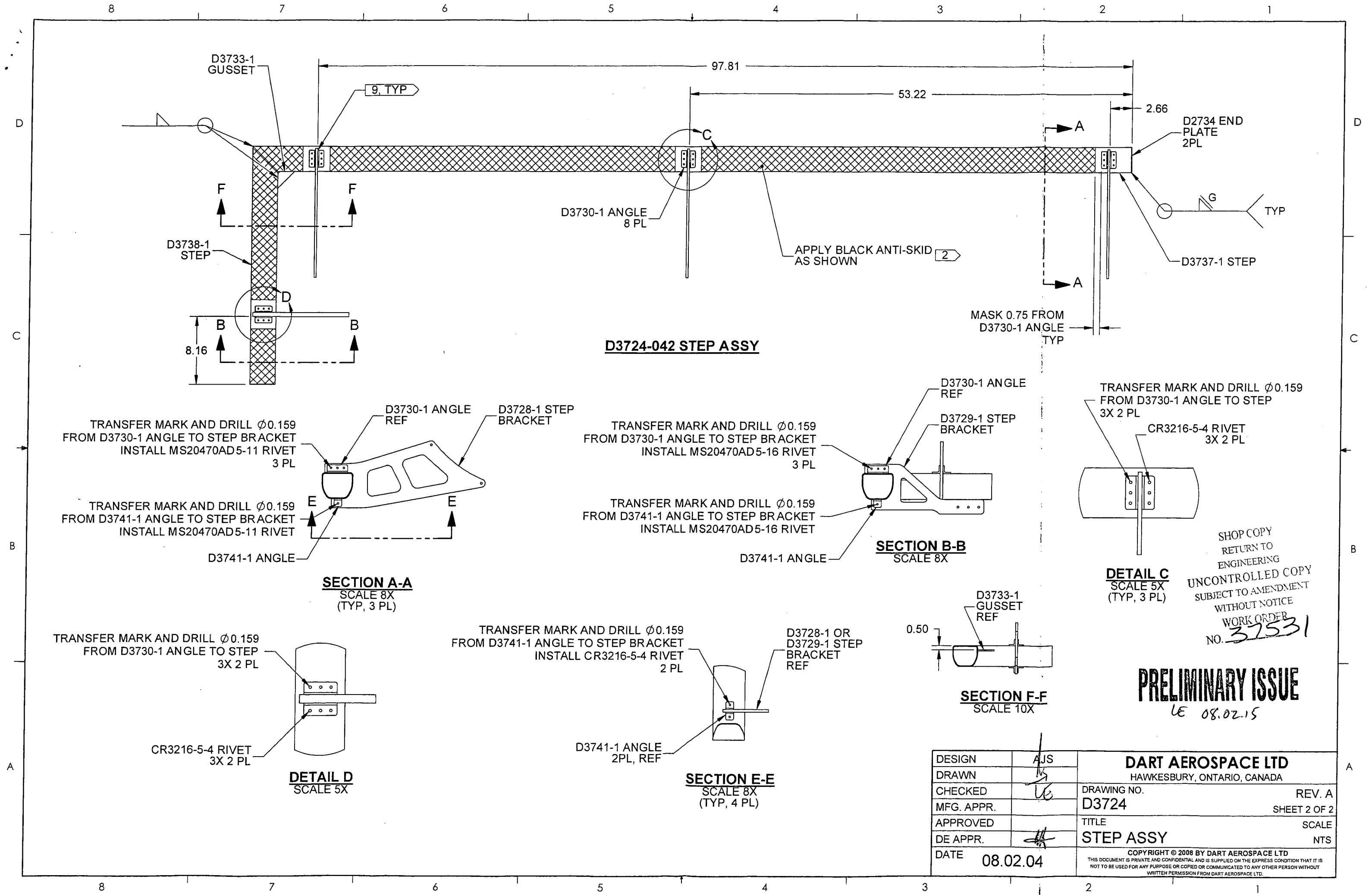
| W/O: | | WORK ORDER CHANGES | | | | | |
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QA: N/C Closed: _____ Date: _____

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NOTE: Date & initial all entries



D3724-042 STEP ASSY

TRANSFER MARK AND DRILL $\phi 0.159$
FROM D3730-1 ANGLE TO STEP BRACKET
INSTALL MS20470AD5-11 RIVET
3 PL

TRANSFER MARK AND DRILL $\phi 0.159$
FROM D3741-1 ANGLE TO STEP BRACKET
INSTALL MS20470AD5-11 RIVET

SECTION A-A
SCALE 8X
(TYP, 3 PL)

TRANSFER MARK AND DRILL $\phi 0.159$
FROM D3730-1 ANGLE TO STEP
3X 2 PL

CR3216-5-4 RIVET
3X 2 PL

DETAIL D
SCALE 5X

TRANSFER MARK AND DRILL $\phi 0.159$
FROM D3730-1 ANGLE TO STEP BRACKET
INSTALL MS20470AD5-16 RIVET
3 PL

TRANSFER MARK AND DRILL $\phi 0.159$
FROM D3741-1 ANGLE TO STEP BRACKET
INSTALL MS20470AD5-16 RIVET

SECTION B-B
SCALE 8X

TRANSFER MARK AND DRILL $\phi 0.159$
FROM D3741-1 ANGLE TO STEP BRACKET
INSTALL CR3216-5-4 RIVET
2 PL

D3728-1 OR
D3729-1 STEP
BRACKET
REF

D3741-1 ANGLE
2PL, REF

SECTION E-E
SCALE 8X
(TYP, 4 PL)

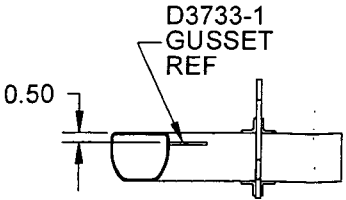
TRANSFER MARK AND DRILL $\phi 0.159$
FROM D3730-1 ANGLE TO STEP
3X 2 PL

CR3216-5-4 RIVET
3X 2 PL

DETAIL C
SCALE 5X
(TYP, 3 PL)

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 37531

PRELIMINARY ISSUE
LE 08.02.15



SECTION F-F
SCALE 10X

| | | | |
|------------|----------|--|--------------|
| DESIGN | AJS | DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA | |
| DRAWN | LE | | |
| CHECKED | LE | DRAWING NO. D3724 | REV. A |
| MFG. APPR. | | | SHEET 2 OF 2 |
| APPROVED | | TITLE STEP ASSY | SCALE NTS |
| DE APPR. | | COPYRIGHT © 2008 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD. | |
| DATE | 08.02.04 | | |